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R E M A R K S

Reconsideration of the present application in view of the following remarks is respectfully requested. Claims 1-3 and 11-13 have been amended. Nineteen claims are pending in the application: Claims 1 through 19.

Allowable Subject Matter

1. Applicant acknowledges with appreciation the Examiner's indication that claims 8-9 and 17-18 would be allowable if rewritten in independent form including all of the limitations of the base claim and intervening claims. At this time Applicant respectfully requests reconsideration of all the pending claims in the Application.

35 U.S.C. §103

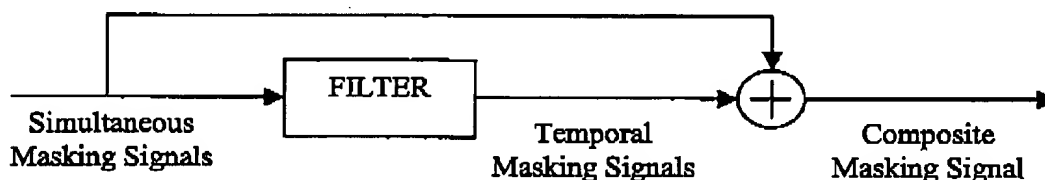
2. Claims 1-7, 10-16, and 19 stand rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,450,522 (Hermansky, et al.) in view of U.S. Patent No. 5,848,384 (Hollier, et al.) and further view of U.S. Patent No. 4,972,484 (Theile).

Hermansky et al. disclose a system for alleviating the harmful effects of convolution distortions of speech on the performance of an automatic speech recognizer. As stated by the Examiner, Hermansky et al. does not disclose "generating approximate replica temporal masking signals at the filter output," as claimed by Applicant. Furthermore, the Examiner states that Hermensky in view of Hollier does not disclose "adding the simultaneous making signals and the replica temporal masking signals to form a composite masking signal."

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The Examiner relies on Theile et al. in order to show Applicant's step of "adding the simultaneous making signals and the replica temporal masking signals to form a composite masking signal." Theile et al. disclose a method of transmitting or storing masked sub-band coded audio signals. The Examiner points to Fig. 3 of Theile to show Applicant's claimed adding step. As shown in Fig. 3 the spectral masking thresholds 5.1 are directly input into the temporal masking thresholds 5.2. Subsequently, at the output of the temporal masking thresholds 5.2 a consideration of the mask to noise ratio is made 5.5. The Examiner has equated step 5.5 to applicants claimed adding step.

In Applicant's method the simultaneous masking signals that are input into the filter are also added to the replica temporal masking signals that are generated at the output of the filter in order to form a composite masking signal. In order to further demonstrate Applicant's method, the following diagram is provided:



As can be seen, the simultaneous masking signals are input into the filter. The temporal masking signals that are generated at the output of the filter are then added to the simultaneous masking signals to form the composite masking signal.

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Theile in contrast teaches a serial process where there is first a determination of spectral masking threshold 5.1, next a determination of the temporal masking thresholds 5.3 as a function of an output of the spectral masking threshold and finally a determination of the total mask to noise ratio 5.5 as a function of the output of the temporal masking threshold. Assuming for argument's sake that Applicant's simultaneous masking signals are the same as the spectral masking thresholds of Theile and that Applicant's temporal masking signals are the same as the temporal masking thresholds of Theile, there is still no teaching or suggestion in Theile that the spectral masking threshold be added to the output of the temporal masking thresholds in order to generate an input to a filter, as recited in Applicant's claims. Fig. 3 of Theile clearly does not show the output of 5.1 being input into 5.2 and also added to the output of 5.2 as required by Applicant's claims. This is further evidenced by the statement at Column 12, lines 40-42 of Theile that "Stages 4.1, 5.2 and 5.5 are connected in series," i.e., Theile teaches a "series" or "series" arrangement, not an arrangement where the input of one stage is added to the output of that same stage in order to generate an input to a third stage. It is this novel arrangement of Applicant's that helps Applicant to computationally simplify the more complex approaches referred to in Applicant's patent application, and illustrated in the references cited by the Examiner.

Thus, Theile does not teach or suggest "adding the simultaneous making signals and the replica temporal masking signals to form a composite masking signal," as claimed by Applicant.

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Furthermore, as stated by the Examiner neither Hermensky in view or Hollier teach or suggest "adding the simultaneous making signals and the replica temporal masking signals to form a composite masking signal." As is such Applicant respectfully submits that claim 1 recited novel and non-obvious subject matter and is therefore in condition for allowance. Claims 2-10 are in condition for allowance at least because of their dependency upon allowable claim 1.

Claim 11, contains the same step of "adding the simultaneous making signals and the replica temporal masking signals to form a composite masking signal." Thus Applicant respectfully submits claim 11 is in condition for allowance for at least the same reasons as stated above with reference to claim 1. Claims 12-19 are in condition for allowance at least because of their dependency upon allowable claim 11.

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C O N C L U S I O N

In view of the above, Applicant submits that the pending claims are in condition for allowance, and prompt and favorable action is earnestly solicited. Applicant has made a diligent effort to place the claims in condition for allowance. However, should there remain any outstanding issues that require adverse action, it is respectfully requested that the Examiner telephone Thomas F. Lebens at (805) 587-7653 so that such issues may be resolved as expeditiously as possible.

Respectfully submitted,



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Dated: October 7, 2004

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